

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF HAWAII

In the Matter of the)
)
PUBLIC UTILITIES COMMISSION) DOCKET NO. 2008-0273
)
Instituting a Proceeding to)
Investigate the Implementation)
Of Feed-in Tariffs.)
_____)

RESPONSES TO THE NATIONAL REGULATORY RESEARCH INSTITUTE'S
INFORMATION REQUESTS ON FEED-IN TARIFFS

BY

HAWAII HOLDINGS, LLC,
DOING BUSINESS AS FIRST WIND HAWAII

and

CERTIFICATE OF SERVICE

PUBLIC UTILITIES
COMMISSION

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FILED

Of Counsel:

CARLSMITH BALL LLP

GERALD A. SUMIDA
TIM LUI-KWAN
NATHAN C. NELSON
ASB Tower, Suite 2200
1001 Bishop Street
Honolulu, Hawaii 96813
Tel. No. (808) 523-2500

Attorneys for Hawaii Holdings, LLC,
Doing Business as First Wind Hawaii

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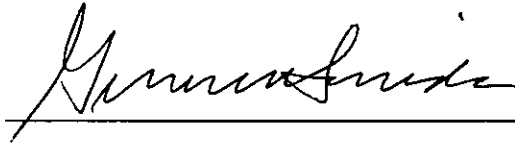
HAWAII HOLDINGS, LLC,
DOING BUSINESS AS FIRST WIND HAWAII

TO THE HONORABLE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII:

HAWAII HOLDINGS, LLC, doing business as First Wind Hawaii, a Delaware limited liability company ("First Wind"), respectfully submits its Responses to the National Regulatory Research Institute's ("NRRI") Information Requests, distributed to the parties in the above docket under cover of the Commission's letter, dated March 2, 2009, pursuant to the Commission's Order Approving the HECO Companies' Proposal Procedural Order, As Modified, filed on January 20, 2009.

Respectfully submitted:

DATED: Honolulu, Hawaii, March 16, 2009.

A handwritten signature in black ink, appearing to read "Gerald A. Sumida", is written over a horizontal line.

GERALD A. SUMIDA
TIM LUI-KWAN
NATHAN C. NELSON

Attorneys for Hawaii Holdings, LLC,
Doing Business as First Wind Hawaii

DOCKET NO. 2008-0273

NRRI'S QUESTIONS FOR FIRST WIND HAWAII

A. Cost considerations

52. On a\$/MW basis, what interconnection costs have you experienced or do you anticipate for wind projects in Hawaii? Please describe how interconnection costs vary by location and project size.

RESPONSE:

First Wind is engaged, through its affiliates, in the development, ownership and operation of large-scale wind energy projects and the sale of electric energy generated by such projects to electric utilities for resale to the ratepayers of such utilities. In Hawaii, First Wind, through its affiliates, has developed the 30 megawatt ("MW") Kaheawa Wind Power Project, located at Kaheawa Pastures, Maui, Hawaii, and sells the electric energy generated to Maui Electric Company, Limited ("MECO") pursuant to a Power Purchase Agreement ("PPA") that has been approved by the Commission, and is also developing (i) a 21 MW wind energy project adjacent to the Kaheawa Wind Power Project site, and will sell electric energy generated therefrom to MECO, (ii) a 30 MW wind energy project in Kahuku, Oahu, and will sell electric energy generated therefrom to Hawaiian Electric Company, Inc. ("HECO"), and (iii) a 350 MW wind energy project on Molokai, and will sell electric energy generated therefrom to HECO. First Wind does not plan to develop any smaller-sized wind energy projects in Hawaii.

Each of these projects involves the design, procurement for and construction of major interconnection facilities, both on First Wind's side and on the utility's side, to interconnect First Wind's wind energy project to the utility's grid. These interconnection facilities include SCADA, RTU and other communications components to enable the utility to control certain aspects of the wind farm's operations pursuant to the PPA, substation, transmission line and related equipment depending upon how far the wind farm is located from the utility's grid system, among other factors. There are also significant effort, time and cost factors in designing the interconnection facilities arises from the need for interconnection requirements studies by the utility to determine what First Wind, as project developer, and the utility must do to meet the specific interconnection requirements of the utility for that particular project.

Further, these interconnection requirements vary significantly depending upon the location of the wind farm site and the utility's grid system as well as the intervening topography and other characteristics of the land over which the interconnection transmission lines must traverse. From First Wind's perspective, the interconnection costs will differ significantly from project to project since, in the project locations in Hawaii, each is significantly different.

53. Based on your experience, are there sufficient wind resources and available land on Oahu for additional development of either MW-class or small wind turbines? If so, please elaborate on where such projects may be possible and how large they could cumulatively be.

RESPONSE:

First Wind is not certain how to answer these questions. The development of "MW-class or small wind turbines" generally will require very different types of conditions. For example, a MW-class wind farm will require an area where the wind regime is sufficient to support the project of the size contemplated (e.g., an area where there is sufficient wind of sufficient continuous velocity over a sufficient area to enable a required amount of electric energy to be generated and which is located sufficiently proximate to the electric utility's grid system to allow cost-effective interconnection, and which is accessible for construction and operational purposes). However, for a small wind turbine, a large backyard in a residential area where there is a sufficient wind regime may be cost effective for that residential owner. Clearly, there might be a few sites on Oahu for the MW-class projects (depending on the project's capacity, e.g., 30, 40 or 50 MW), and there could conceivably be numerous sites for small wind turbines. However, other than the site for its wind energy project on Oahu, First Wind has not conducted any systematic studies to locate additional potential wind project sites on Oahu.

54. Based on your experience, how much more expensive in \$/MW are wind turbines in Hawaii than is typical in the mainland United States? Please describe the differences in detail. Is this different changing or likely to persist?

RESPONSE:

As far as First Wind is concerned, wind turbines in Hawaii are more expensive than on the U.S. mainland due principally to the cost of shipping the turbines to Hawaii and the cost of the State use taxes levied upon the landed cost of the wind turbines. First Wind has not done any research on the comparative costs of wind turbines in different part of the U.S. mainland nor the different costs of wind turbines manufactured by different manufacturers and/or of different rated capacities. First Wind presumes that any differences between wind turbines in Hawaii and on the U.S. mainland will persist as long as the costs of shipping and the State use tax remain.

55. Based on your experience, how much more expensive in \$/MW are permitting, land acquisition, and installation, including crane rental, in Hawaii than is typical in the mainland United States? Please describe the differences in detail. Is this different changing or likely to persist?

RESPONSE:

First Wind notes that the "mainland United States" encompasses a very broad geographic area with substantial differences in different parts of the country as far as permitting, acquisition and installation costs are concerned, and it is different to generalize based on a typical or uniform sets of such costs for the entire mainland U.S. First Wind further notes that each of the islands of Hawaii is relatively small and fairly densely populated (especially Oahu and parts of Maui, where First Wind has projects), thus resulting in high economic values for land in general and relatively few wide-open places with good wind regimes sufficient to support a large-scale wind energy project (e.g., 20 MW or more). Nevertheless, First Wind has found, in its development experience in Hawaii vis-à-vis the U.S. mainland where it is developing wind energy project, that permitting requirements are generally more extensive, detailed and time-intensive; land acquisition costs are more expensive; and installation costs in general are more expensive. First Wind does not expect these costs to change, except probably to increase.

B. Small wind in Hawaii

56. Are there any installed wind turbines in Hawaii with less than 150 kW of capacity? If so, please describe their sizes in kW, locations, total number, aggregate capacity, and installation years.

RESPONSE:

Please see response to Question 52. First Wind does not have any information on installed wind turbines with less than 150 kW of capacity in Hawaii and is unable to respond to this question.

57. Are wind turbines of less than 150 kW generally utility curtailable? Please describe any additional expense associated with modifying small wind turbines to make them curtailable.

RESPONSE:

Please see response to Question 52. First Wind does not have any information on installed wind turbines with less than 150 kW of capacity in Hawaii and is unable to respond to this question.

58. Please identify all environmental regulations, zoning ordinances, and other barriers to the development of wind resources in Oahu. Please describe such restrictions for both small wind turbines and large wind farms.

RESPONSE:

Please see response to Question 52 with respect to small wind turbines. . First Wind does not have any information on installed wind turbines with less than 150 kW of capacity in Hawaii and is unable to respond to this question. With respect to large wind farms, First Wind presumes that this question centers on legal "barriers" to the development of large wind farms, and on that basis would mention the following legal "restrictions" that apply to the development of wind farms: (1) environmental regulations, especially where State or County lands are involved, archaeological sites are located, endangered specials (flora and/or fauna) are located); and (2) zoning ordinances, where wind farm development is not a permitted use, and permitting requirements where wind farm development is a permitted use. First Wind is not aware of any other legal barriers to the development of wind energy projects in its experience in Hawaii.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served copies of the foregoing motion upon the following parties, by causing copies hereof to be hand delivered or electronically transmitted to each such party as follows:

CATHERINE P. AWAKUNI
EXECUTIVE DIRECTOR
DEPT OF COMMERCE & CONSUMER AFFAIRS
DIVISION OF CONSUMER ADVOCACY
P.O. Box 541
Honolulu, Hawaii 96809

2 Copies
Via Hand Delivery

DEAN MATSUURA
MANAGER
REGULATORY AFFAIRS
HAWAIIAN ELECTRIC COMPANY, INC.
P.O. Box 2750
Honolulu, HI 96840-0001

Electronically Transmitted

JAY IGNACIO
PRESIDENT
HAWAII ELECTRIC LIGHT COMPANY, INC.
P. O. Box 1027
Hilo, HI 96721-1027

Electronically Transmitted

EDWARD L. REINHARDT
PRESIDENT
MAUI ELECTRIC COMPANY, LTD.
P. O. Box 398
Kahului, HI 96732

Electronically Transmitted

THOMAS W. WILLIAMS, JR., ESQ.
PETER Y. KIKUTA, ESQ.
DAMON L. SCHMIDT, ESQ.
GOODSILL, ANDERSON QUINN & STIFEL
Alii Place, Suite 1800
1099 Alakea Street
Honolulu, Hawaii 96813

Electronically Transmitted

Co-Counsel for HECO, HELCO and MECO

ROD S. AOKI, ESQ.
ALCANTAR & KAHL LLP
120 Montgomery Street
Suite 2200
San Francisco, CA 94104

Electronically Transmitted

Co-Counsel for HECO, HELCO and MECO

MARK J. BENNETT, ESQ.
DEBORAH DAY EMERSON, ESQ.
GREGG J. KINKLEY, ESQ.
DEPARTMENT OF THE ATTORNEY GENERAL
425 Queen Street
Honolulu, Hawaii 96813

Electronically Transmitted

Counsel for DBEDT

CARRIE K.S. OKINAGA, ESQ.
GORDON D. NELSON, ESQ.
DEPARTMENT OF THE CORPORATION COUNSEL
CITY AND COUNTY OF HONOLULU
530 South King Street, Room 110
Honolulu, Hawaii 96813

Electronically Transmitted

LINCOLN S.T. ASHIDA, ESQ.
WILLIAM V. BRILHANTE JR., ESQ.
MICHAEL J. UDOVIC, ESQ.
DEPARTMENT OF THE CORPORATION COUNSEL
COUNTY OF HAWAII
101 Aupuni Street, Suite 325
Hilo, Hawaii 96720

Electronically Transmitted

MR. HENRY Q CURTIS
MS. KAT BRADY
LIFE OF THE LAND
76 North King Street, Suite 203
Honolulu, Hawaii 96817

Electronically Transmitted

MR. CARL FREEDMAN
MR. MICHAEL CHAMPLEY
HAIKU DESIGN & ANALYSIS
4234 Hana Highway
Haiku, Hawaii 96708

Electronically Transmitted

MR. WARREN S. BOLLMEIER II
PRESIDENT
HAWAII RENEWABLE ENERGY ALLIANCE
46-040 Konane Place, #3816
Kaneohe, Hawaii 96744

Electronically Transmitted

DOUGLAS A. CODIGA, ESQ.
SCHLACK ITO LOCKWOOD PIPER & ELKIND
TOPA FINANCIAL CENTER
745 Fort Street, Suite 1500
Honolulu, Hawaii 96813

Electronically Transmitted

Counsel for BLUE PLANET FOUNDATION

MR. MARK DUDA
PRESIDENT
HAWAII SOLAR ENERGY ASSOCIATION
P.O. Box 37070
Honolulu, Hawaii 96837

Electronically Transmitted

MR. RILEY SAITO
THE SOLAR ALLIANCE
73-1294 Awakea Street
Kailua-Kona, Hawaii 96740

Electronically Transmitted

JOEL K. MATSUNAGA
HAWAII BIOENERGY, LLC
737 Bishop Street, Suite 1860
Pacific Guardian Center, Mauka Tower
Honolulu, Hawaii 96813

Electronically Transmitted

KENT D. MORIHARA, ESQ.
KRIS N. NAKAGAWA, ESQ.
SANDRA L. WILHIDE, ESQ.
MORIHARA LAU & FONG LLP
841 Bishop Street, Suite 400
Honolulu, Hawaii 96813

Electronically Transmitted

Counsel for HAWAII BIOENERGY, LLC, and
MAUI LAND & PINEAPPLE COMPANY, INC.

MR. THEODORE E. ROBERTS
SEMPRA GENERATION
101 Ash Street, HQ 12
San Diego, California 92101

Electronically Transmitted

MR. CLIFFORD SMITH
MAUI LAND & PINEAPPLE COMPANY, INC.
P.O. Box 187
Kahului, Hawaii 96733

Electronically Transmitted

MR. ERIK KVAM
CHIEF EXECUTIVE OFFICER
ZERO EMISSIONS LEASING LLC
2800 Woodlawn Drive, Suite 131
Honolulu, Hawaii 96822

Electronically Transmitted

JOHN N. REI
SOPOGY INC.
2660 Waiwai Loop
Honolulu, Hawaii 96819

Electronically Transmitted

MR. CHRIS MENTZEL
CHIEF EXECUTIVE OFFICER
CLEAN ENERGY MAUI LLC
619 Kupulau Drive
Kihei, Hawaii 96753

Electronically Transmitted

MR. HARLAN Y. KIMURA, ESQ.
CENTRAL PACIFIC PLAZA
220 South King Street, Suite 1660
Honolulu, Hawaii 96813

Electronically Transmitted

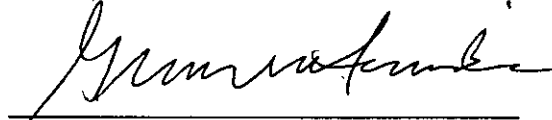
Counsel for TAWHIRI POWER LLC

SANDRA-ANN Y.H. WONG, ESQ.
ATTORNEY AT LAW, A LAW CORPORATION
1050 Bishop Street, #514
Honolulu, HI 96813

Electronically Transmitted

Counsel for ALEXANDER & BALDWIN, INC.,
Through its division, HAWAIIAN COMMERCIAL & SUGAR COMPANY

DATED: Honolulu, Hawaii, March 16, 2009.



GERALD A. SUMIDA
TIM LUI-KWAN
NATHAN C. NELSON

Attorneys for Hawaii Holdings, LLC,
Doing Business as First Wind Hawaii